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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2008; month=10; day=20; hr=14; min=33; sec=49; ms=280;  
]

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Application No: 10502515 Version No: 2.0

**Input Set:****Output Set:**

**Started:** 2008-09-17 17:10:41.800  
**Finished:** 2008-09-17 17:10:44.376  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 576 ms  
**Total Warnings:** 51  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 51  
**Actual SeqID Count:** 51

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
W 402	Undefined organism found in <213> in SEQ ID (6)
W 402	Undefined organism found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

**Started:** 2008-09-17 17:10:41.800  
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**Total Warnings:** 51  
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Error code	Error Description
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W 402	Undefined organism found in <213> in SEQ ID (22)
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W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 402	Undefined organism found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)
W 213	Artificial or Unknown found in <213> in SEQ ID (31) This error has occurred more than 20 times, will not be displayed
W 402	Undefined organism found in <213> in SEQ ID (41)
W 402	Undefined organism found in <213> in SEQ ID (42)
W 402	Undefined organism found in <213> in SEQ ID (43)
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# SEQUENCE LISTING

<110> Brugliera, Filippa  
Demelis, Linda  
Koes, Ronald  
Tanaka, Yoshikazu

<120> Genetic sequences and uses therefor

<130> 17922

<140> 10502515

<141> 2005-05-27

<160> 51

<170> PatentIn version 3.1

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<211> 969

<212> DNA

<213> Petunia

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cttgctttgc cagaagatgg gaaagtaata gcaattgacc cggacagaga ggcatatgag	360
gttggtattc cttatattca gaaggctggg gtggaacata agatcgagtt cattcaatca	420
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gtcaatagct ttttagctac tgacctcgt gttgaagtag ctcaacttc aattggtgat	720
ggccttacc tttgcaggcg tctctcctag gtccagttaa ttggtgcaat gccaaagtaa	780
cgcaagata tgtactagat gtatgtcagg ggttgaattt attgaattta tggtgttgag	840
aagaacaaaa gttctatatt tgtgttggtt gcaagtattt gaaacttgta ggagcctttt	900
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<212> PRT

<213> Petunia

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Thr Gly Lys Thr Ala His Pro Gly Ile Leu Arg Ser Asp Ala Leu Arg  
20 25 30

Lys Tyr Ile Leu Glu Thr Ser Val Tyr Pro Arg Glu His Glu Leu Leu  
35 40 45

Lys Glu Leu Thr Lys Ala Ser Phe Glu Asn Tyr Lys Ala Ala Ser Phe  
50 55 60

Met Gly Leu Pro Gln Asp Glu Ala Gln Phe Leu Ser Met Phe Leu Lys  
65 70 75 80

Leu Ile Asn Ala Lys Lys Thr Leu Glu Ile Gly Val Phe Thr Gly Tyr  
85 90 95

Ser Leu Leu Val Thr Ala Leu Ala Leu Pro Glu Asp Gly Lys Val Ile  
100 105 110

Ala Ile Asp Pro Asp Arg Glu Ala Tyr Glu Val Gly Leu Pro Tyr Ile  
115 120 125

Gln Lys Ala Gly Val Glu His Lys Ile Glu Phe Ile Gln Ser Glu Ala  
130 135 140

Val Pro Val Leu Glu Lys Leu Leu Ser Asn Glu Lys Glu Ala Gly Thr  
145 150 155 160

Phe Asp Phe Val Phe Ile Asp Ala Asp Lys Glu Asn Tyr Leu Lys Tyr  
165 170 175

His Glu Ile Val Leu Lys Leu Val Lys Val Gly Gly Val Ile Gly Tyr  
180 185 190

Asp Asn Thr Leu Trp Phe Gly Thr Val Ala Leu Ser Glu Asp Asp Pro  
195 200 205

Met Pro Glu Gly Leu Arg Ala Leu Arg Gly His Val Met Lys Val Asn  
210 215 220

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Gly Asp Gly Leu Thr Leu Cys Arg Arg Leu Ser  
245 250

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<213> Artificial Sequence

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<223> oligonucleotide

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<213> Petunia

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tacatttttg aaacctcagt ttatccaaga gagcatgagc tactcaaaga actaacaaaa 180

gcttcattcg agaattataa agcagcgagc tttatgggtc ttctcaaga tgaagcccag 240

tttctatcga tgttcctaaa gtcataaat gcaaagaaaa cactagagat tggagttttc 300

actggttact ctctgcttgt tactgctctt gctttgccag aagatgggaa agtaatagca 360

attgacccgg acagagaggc atatgaggtt ggattacctt atattcagaa ggctggtgtg 420

gaacataaga tcgagttcat tcaatcagaa gccgtgcccg ttcttgaaaa actcctctct 480

aacgagaaaag aagcagggac atttgatttc gtgttcattg atgctgataa ggagaattat 540

ttgaagtacc atgagatagt gctaaaattg gtgaaagttg gaggagtgat aggatatgac 600

aacaccttat ggtttgggac agtggcactt tcagaggatg atccaatgcc agaaggttta 660

agagcattaa ggggacatgt tatgaaggtc aatagctttt tagctactga ccctcgtgtt 720  
 gaagtagctc aactttcaat tggatgatggc cttacccttt gcaggcgtct ctcctaggtc 780  
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 tgaatttatt gaatttatgt tgttgagaag aaaaaaaaaa aaaaaaaaaa 888

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 <213> Petunia

<400> 5

Ile Pro Leu Leu Ser His Phe Ser Ile Phe Leu Lys Ser Thr Leu Asn  
 1 5 10 15

Leu Asn Ile Thr Thr Lys Asp Phe Thr Glu Ala Met Thr Gly Lys Thr  
 20 25 30

Ala His Pro Gly Ile Leu Arg Ser Asp Ala Leu Arg Lys Tyr Ile Leu  
 35 40 45

Glu Thr Ser Val Tyr Pro Arg Glu His Glu Leu Leu Lys Glu Leu Thr  
 50 55 60

Lys Ala Ser Phe Glu Asn Tyr Lys Ala Ala Ser Phe Met Gly Leu Pro  
 65 70 75 80

Gln Asp Glu Ala Gln Phe Leu Ser Met Phe Leu Lys Leu Ile Asn Ala  
 85 90 95

Lys Lys Thr Leu Glu Ile Gly Val Phe Thr Gly Tyr Ser Leu Leu Val  
 100 105 110

Thr Ala Leu Ala Leu Pro Glu Asp Gly Lys Val Ile Ala Ile Asp Pro  
 115 120 125

Asp Arg Glu Ala Tyr Glu Val Gly Leu Pro Tyr Ile Gln Lys Ala Gly  
 130 135 140

Val Glu His Lys Ile Glu Phe Ile Gln Ser Glu Ala Val Pro Val Leu  
 145 150 155 160

Glu Lys Leu Leu Ser Asn Glu Lys Glu Ala Gly Thr Phe Asp Phe Val

165

170

175

Phe Ile Asp Ala Asp Lys Glu Asn Tyr Leu Lys Tyr His Glu Ile Val  
 180 185 190

Leu Lys Leu Val Lys Val Gly Gly Val Ile Gly Tyr Asp Asn Thr Leu  
 195 200 205

Trp Phe Gly Thr Val Ala Leu Ser Glu Asp Asp Pro Met Pro Glu Gly  
 210 215 220

Leu Arg Ala Leu Arg Gly His Val Met Lys Val Asn Ser Phe Leu Ala  
 225 230 235 240

Thr Asp Pro Arg Val Glu Val Ala Gln Leu Ser Ile Gly Asp Gly Leu  
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Thr Leu Cys Arg Arg Leu Ser  
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<210> 6

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<212> DNA

<213> Petunia

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ctagtgtgta tccaagagaa cacgagcaac tcaaagaact cacacaagcc tcattcgata	180
agtataaaat agtgagcttg atgggtgtgc ctccagatga agcccaattt ctctcgatgc	240
tcttaaaaaat aatgaatgca aagaagacaa tggagattgg agtttttacc gggtattctc	300
ttctggctac tgctcttgca ttgccagaag atggaaaaat tatagcgatt gatccggaca	360
gagaagcata tgaggttgga ttgccatata ttcagaaggc tgggtgtggag cataagattg	420
aatttattca atcagaagcc ttaccagtac tcgaaaaact cctctaacgg tgaggaagaa	480
ggaacatttg atttcatatt cattgatgct gataaggaga actatctgaa gtaccatgag	540
atagtactaa aattggtgaa agtgggagga gtgataggct atgacaacac attatggttt	600
gggaccgtgg cactttcaga tgatgaccc ataccacaag gcttaagaga attgaggaga	660
tcggttttga agatcaacag ttttttagct actgaccc cgcattgaatt agctcatctt	720



tcaattggtg atggtcttac ccttggcagg cgtctcagct agtttatatt tcgtataatc 780  
atctgaattc cggaatccat tatctttata gttttttggt tttcagtact agtgatattt 840  
ttcagtcacc acttatggat aacactgggt aatgagtatt gttgcagaag tagtgacatt 900  
tttaagtttg gttcgtccat ctgctaaaga agtcacgatt tcgtcttgta gacgagctat 960  
agtatgcatt tgcatttttg ttaatttcgc atgtagtggt gaaatgtgaa ttacccaaaag 1020  
caaaagtaat aaaatgttta catttggtgt gttttaaaaa aaaaaaaaaa aaaaaaa 1077

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<212> PRT  
<213> Petunia

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Ile Ser Lys Asp Phe Thr Glu Ser Met Ala Gly Lys Ser Gly His Gly  
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Ser Ile Leu Gln Ser Glu Ala Leu Lys Lys Tyr Ile Phe Glu Thr Ser  
20 25 30

Val Tyr Pro Arg Glu His Glu Gln Leu Lys Glu Leu Thr Gln Ala Ser  
35 40 45

Phe Asp Lys Tyr Lys Ile Val Ser Leu Met Gly Val Pro Pro Asp Glu  
50 55 60

Ala Gln Phe Leu Ser Met Leu Leu Lys Ile Met Asn Ala Lys Lys Thr  
65 70 75 80

Met Glu Ile Gly Val Phe Thr Gly Tyr Ser Leu Leu Ala Thr Ala Leu  
85 90 95

Ala Leu Pro Glu Asp Gly Lys Ile Ile Ala Ile Asp Pro Asp Arg Glu  
100 105 110

Ala Tyr Glu Val Gly Leu Pro Tyr Ile Gln Lys Ala Gly Val Glu His  
115 120 125

Lys Ile Glu Phe Ile Gln Ser Glu Ala Leu Pro Val Leu Glu Lys Leu  
130 135 140

Leu Ser Asn Gly Glu Glu Glu Gly Thr Phe Asp Phe Ile Phe Ile Asp

145 150 155 160

Ala Asp Lys Glu Asn Tyr Leu Lys Tyr His Glu Ile Val Leu Lys Leu  
165 170 175

Val Lys Val Gly Gly Val Ile Gly Tyr Asp Asn Thr Leu Trp Phe Gly  
180 185 190

Thr Val Ala Leu Ser Asp Asp Asp Pro Ile Pro Gln Gly Leu Arg Glu  
195 200 205

Leu Arg Arg Ser Val Leu Lys Ile Asn Ser Phe Leu Ala Thr Asp Pro  
210 215 220

Arg Ile Glu Leu Ala His Leu Ser Ile Gly Asp Gly Leu Thr Leu Gly  
225 230 235 240

Arg Arg Leu Ser

<210> 8  
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gcatggatcc acaggcaaaa ccgccaccc tg 32

<210> 10  
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<211> 1006

<212> DNA

<213> Torenia

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tgaaagataa gttctatggc accattttgc agagcgaagc cctcgcaaag tatctgttag 120

agacaagtgc ctatccacga gaacatccgc agctcaaaga actaaggagc gcaactgtgg 180

acaagtatca atattggagc ttgatgaatg ttccagctga tgaggggcag ttcatttcaa 240

tgttactgaa aattatgaac gcaaaaaaga caattgaagt tggagttttc acaggctact 300

cactcctatc aactgctctg gctctacctg atgatggcaa aatcgttgcc attgatcctg 360

atagagaagc ttatgagact ggtttgccat ttatcaagaa agcaaactg gctcataaaa 420

tccaatacat acaatctgat gccatgaaag tcatgaatga cctcattgct gccaaaggag 480

aagaagaaga ggggagcttt gactttgggt tcgtggatgc agacaaagaa aactacataa 540

actaccacga gaaactgttg aagctgggta aggttggagg gatcatagga tacgacaaca 600

ctctgtgggc tggaacagtt gctgcatctg aagacgatga gaataatatg cgagactact 660

taagagggtg cagagggcat atcctcaaac taaactcctt tctcgcaaac gatgatcgga 720

ttgaattggc tcacctctct attggagatg gactcacctt gtgcaaactg ctcaaataat 780

aattttcaac tttattatta ttgtttcata aaaagcattt actgctggcc tggcctggcc 840

tgtttcagca ttttatattt ctattgttct aaatatatta gttatcttgt ttatcaactt 900

gtctgtctta tatgtttaaa agaaagatgt catgtaattg taactcgatc gggctcttgt 960

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<212> PRT

<213> Torenia

<400> 12

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5

10

15

Lys Tyr Leu Leu Glu Thr Ser Ala Tyr Pro Arg Glu His Pro Gln Leu  
 20 25 30

Lys Glu Leu Arg Ser Ala Thr Val Asp Lys Tyr Gln Tyr Trp Ser Leu  
 35 40 45

Met Asn Val Pro Ala Asp Glu Gly Gln Phe Ile Ser Met Leu Leu Lys  
 50 55 60

Ile Met Asn Ala Lys Lys Thr Ile Glu Val Gly Val Phe Thr Gly Tyr  
 65 70 75 80

Ser Leu Leu Ser Thr Ala Leu Ala Leu Pro Asp Asp Gly Lys Ile Val  
 85 90 95

Ala Ile Asp Pro Asp Arg Glu Ala Tyr Glu Thr Gly Leu Pro Phe Ile  
 100 105 110

Lys Lys Ala Asn Val Ala His Lys Ile Gln Tyr Ile Gln Ser Asp Ala  
 115 120 125

Met Lys Val Met Asn Asp Leu Ile Ala Ala Lys Gly Glu Glu Glu Glu  
 130 135 140

Gly Ser Phe Asp Phe Gly Phe Val Asp Ala Asp Lys Glu Asn Tyr Ile  
 145 150 155 160

Asn Tyr His Glu Lys Leu Leu Lys Leu Val Lys Val Gly Gly Ile Ile  
 165 170 175

Gly Tyr Asp Asn Thr Leu Trp Ser Gly Thr Val Ala Ala Ser Glu Asp  
 180 185 190

Asp Glu Asn Asn Met Arg Asp Tyr Leu Arg Gly Cys Arg Gly His Ile  
 195 200 205

Leu Lys Leu Asn Ser Phe Leu Ala Asn Asp Asp Arg Ile Glu Leu Ala  
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His Leu Ser Ile Gly Asp Gly Leu Thr Leu Cys Lys Arg Leu Lys  
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 <223> N = A or G or C or T

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31

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26

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<211> 45

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<213> Artificial Sequence

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<400> 19

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45

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<213> Artificial Sequence

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